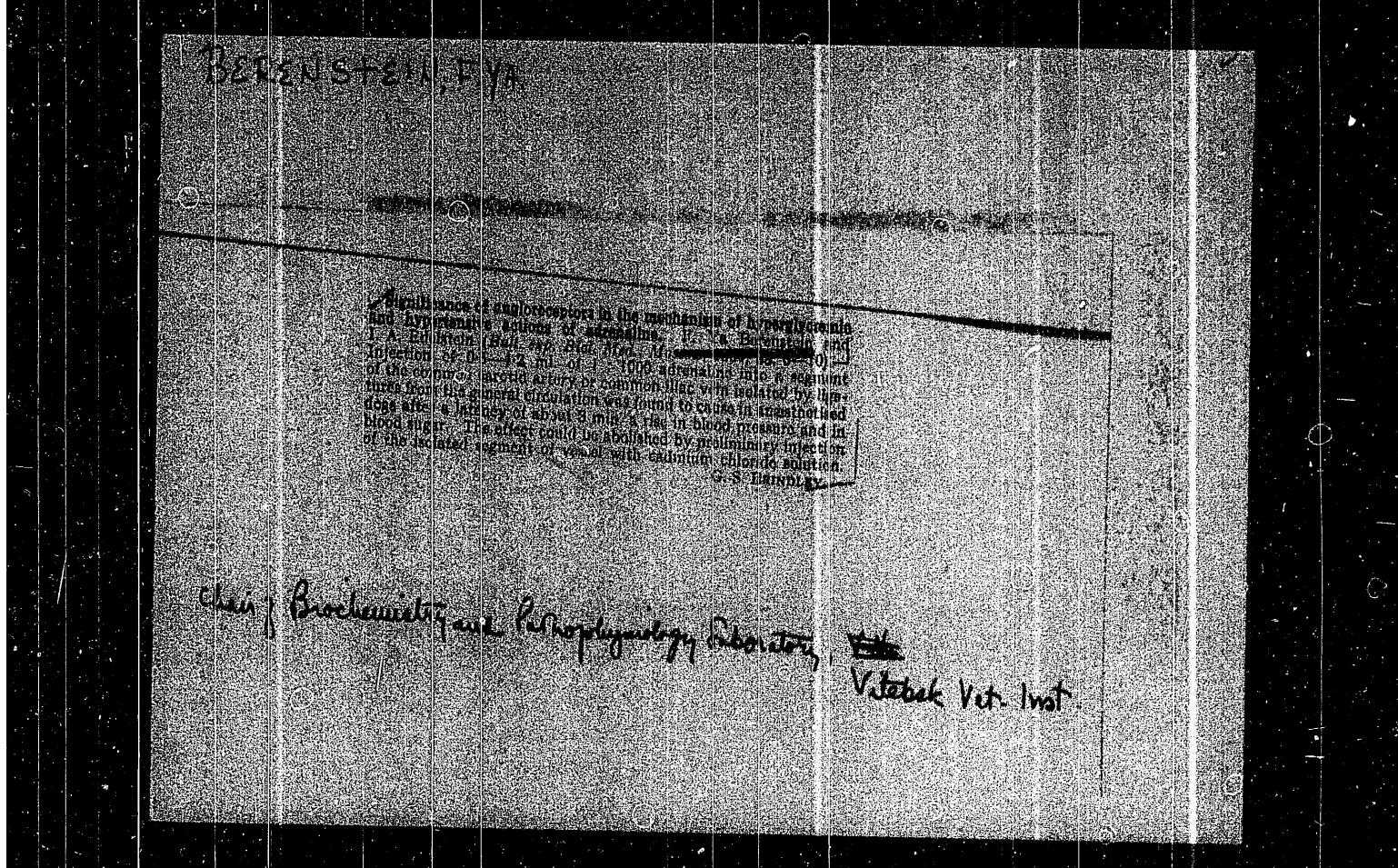
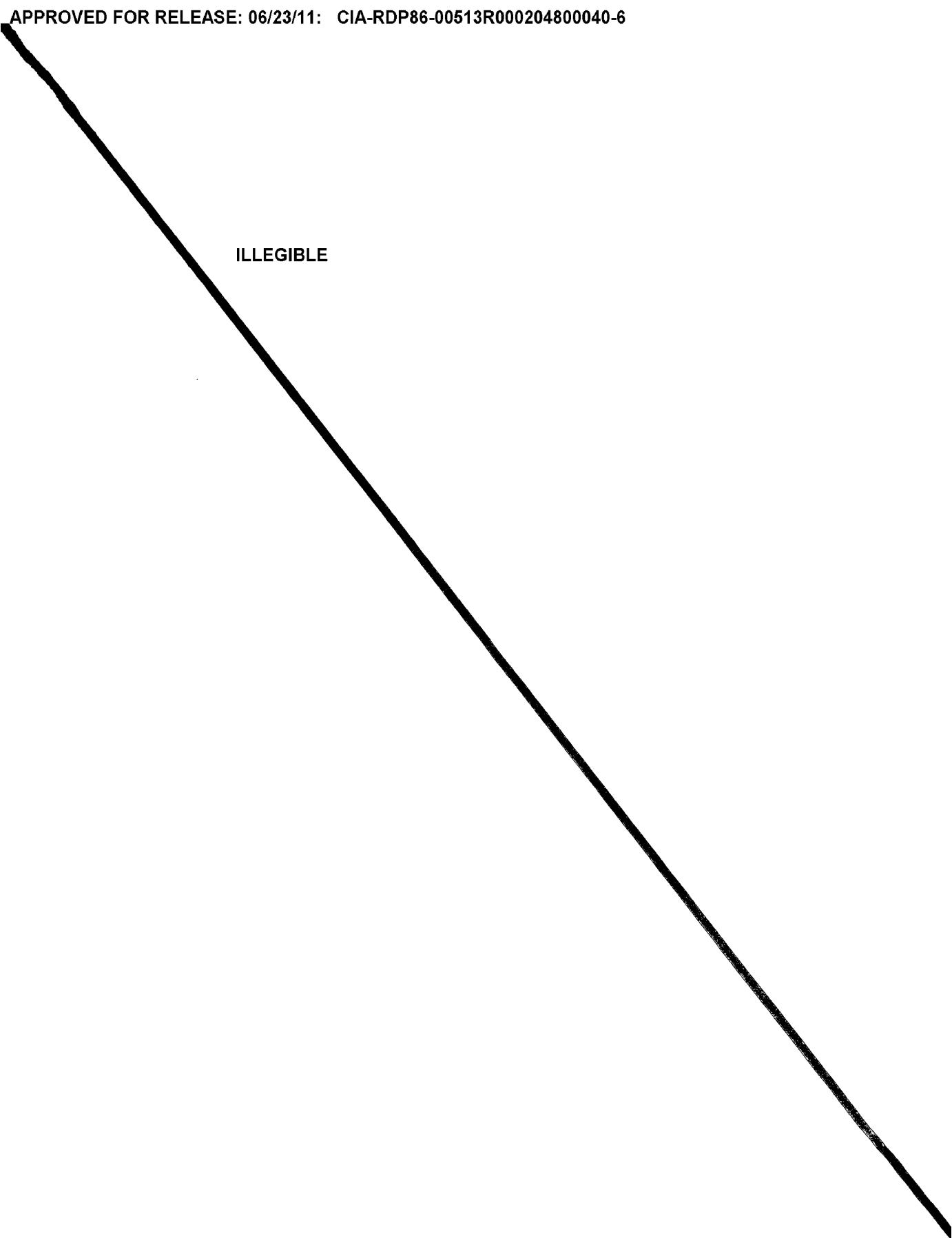


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ILLEGIBLE



BERENSHTEYN, F.Ya.

✓ The interrelation between microelements and vitamins.
I. Cadmium and ascorbic acid. F. Ya. Berenshteyn, M.
M. Kichman, and N. S. Khidokel. *Ocherky Zapiski Vtelsk.*
Vet. Inst. 13, 80-8(1954); *Rasprav. Zhur. Khim., Biol.*
Khim. 1955, No. 0883.—It was shown in expts. with rabbits
that the subcutaneous injection of Cd (as CdCl₂) in doses of
1-2 mg. in the course of a month causes a considerable
lowering in the content of ascorbic acid (I) in the muscles,
liver, spleen, kidneys, adrenals, lungs, cerebrum, cere-
bellum, and the eyes. It appears to have no effect on the
content of I in the blood. The addn. of CdCl₂ or of Cd-
(NO₃)₂ to solns. of I *in vitro* at the rate of 0.125 to 1.0 mg./ml.
hastens the oxidation of I. (2)
B. S. Levine

BERENSHTEYN, F.Ya.

Biological effects of fluorine. Uspekhi Sovremennoy Biol. 35, 216-28 '53.
(CA 47 no.22:12660 '53) (MLRA 6:4)

BERGSHTEYN, F.Ya.

Metabolism and the central nervous system. Uspekhi Sovremennoy Biol.
34, 367-83 '52. (MLRA 5:12)
(CA 47 no.14:7070 '53)

1. Med. Inst., Vitebsk.

BERENSHTEYN, F.Ya.

Significance of Pavlovian ideas in the development of endocrinology.
Sovet Med. 16 no. 11:11-16 Nov 1952. (CLML 23:3)

1. Professor. 2. Vitebsk.

CA

11E

Effect of zinc salts on carbohydrate metabolism. F. Ya. Berenstein and M. I. Shkol'nik (Vitebsk Vet. Inst.) "PEIN" Zhur. S.S.R. **37**, 129-4(1951). Subcutaneous injection into rabbits or dogs of 0.1-0.2 mg./kg. of salts of Zn did not affect blood sugar; at 0.5-5.0 dosage hyperglycemic effects appeared. $ZnSO_4$ caused increased adrenaline hyperglycemia and weakened the insulin hypoglycemia; it lowered alimentary hyperglycemia in dogs and lowered the glycolytic activity of the blood. G. M. Kosolapoff

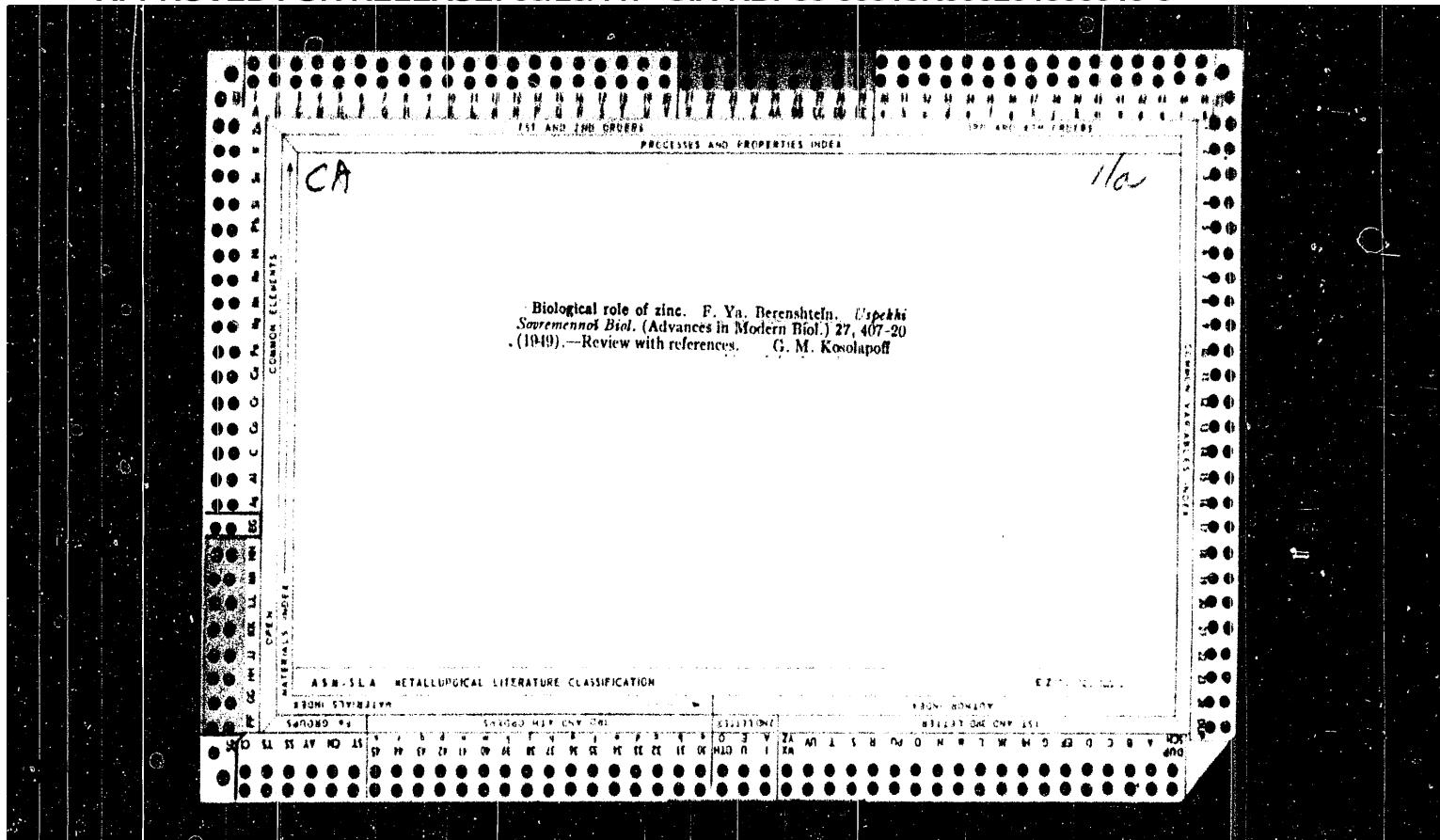
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CH

116

Biological role of copper. F. Ya. Berenshtam, I. Lipchik
Sovremennol. Biol. 29, No. 2, 177-93 (1950). Review
with numerous references. G. M. Kosolapoff

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BERENSHTEYN, ~~Vitebsk~~
F.Ye.

PA 3/49T61

USER/Medicine - Manganese and Manganese Compounds Mar/Apr 48
Medicine - Reproduction

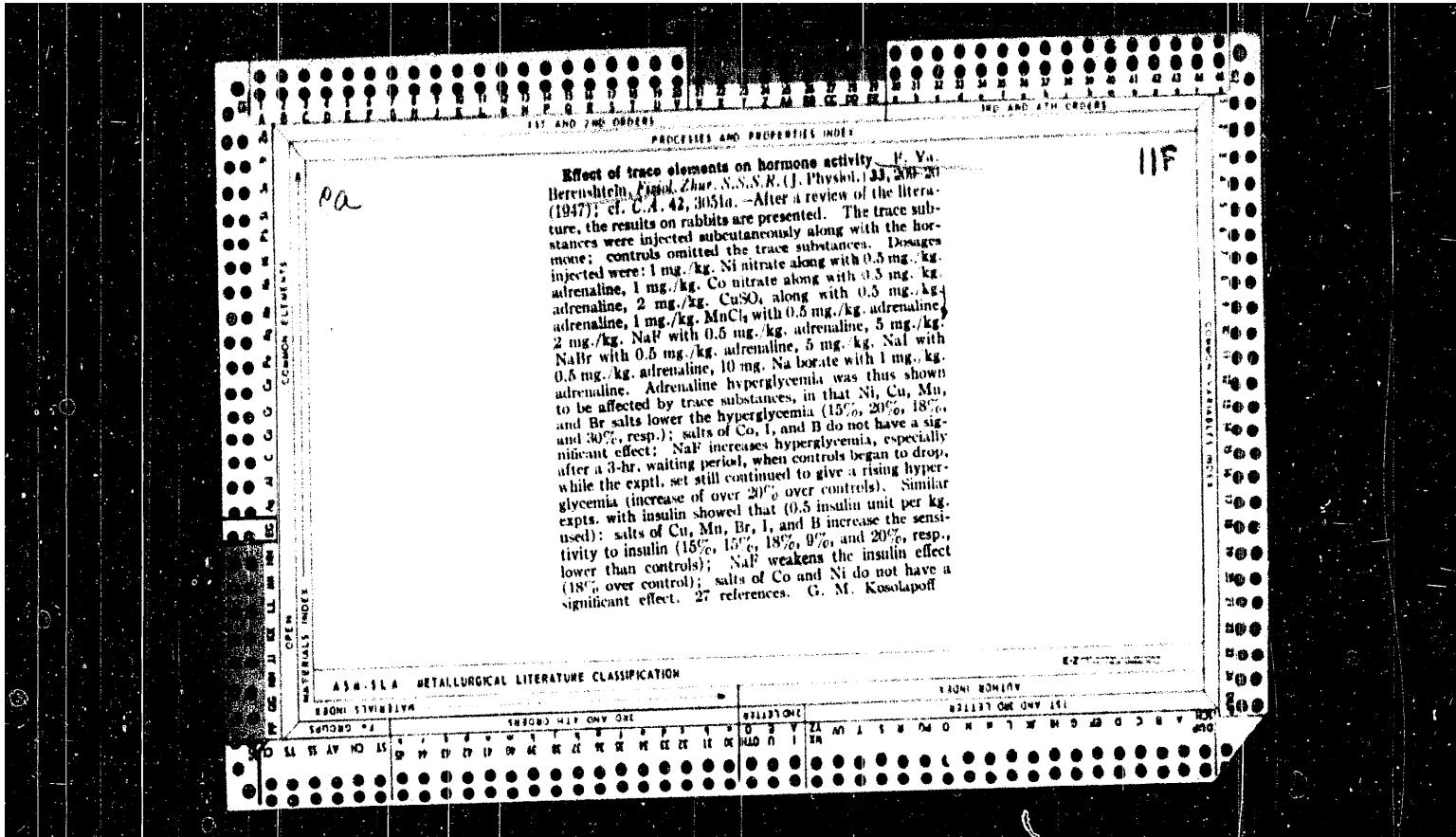
"The Biological Role of Manganese," F. Ye.
Berenshteyn, Vitebsk, 12 pp

"Uspekhi Sovrem Biol" Vol XXV, No 2

Quotes analysis figures showing universal occurrence of manganese in living tissues. Lists views of various authorities on role of manganese in growth and reproduction processes. Refers to its effect on blood production, enzymes, and endocrine glands. It stimulates formation of antibodies and increases resistance against certain infectious diseases.

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CHARACTER AND PROPERTIES INDEX

ccw
II F

Biological role of salts of elements occurring in the organism in minute quantities. XIX. The role of fluorine.
By N. A. Berenshtain. *Russ. Eksp. Biol. Med.* 19, No. 3, 78(1955); *J. C. S.* 40, 1915--Injection of NaF in small doses (0.3 mg. to 5 mg. per kg.) in dogs and rabbits produces hyperglycemia. NaF stimulates adrenalin production, has no influence on albuterol hyperglycemia, and decreases the hypoglycemia of insulin. Fluorite both *in vivo* and *in vitro* influences metabolism.

D. I. Macht

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

Biological role of the salts of the elements that occur in the organism in minute quantities. XIX. Role of fluorine in carbohydrate metabolism. I. Ya. Berezitskii (Kafedra Biokhimiia Meditsinskogo Inst., Vitебsk). *Russ. Ekspir. Biol. Med.* 19, No. 3, 57-60 (1945); cf. *C.A.*, 38, 1017. Subcutaneous injections of NaF in minimal doses produce a marked hyperglycemia in guinea pigs. NaF increases adrenalin hyperglycemia, exerts no definite influence on alimentary hyperglycemia, and lowers the hypoglycemia produced by insulin. It appears that *In vivo* and *in vitro* affects carbohydrate metabolism. D. I. Macht

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ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

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The influence of certain alkaloids on the agglutination of erythrocytes by hydrogen ions. I. Ya. Berenshtain
J. Physiol. U.S.S.R. 22, 856-862 or German Std 25 (1937). The subcutaneous injection of 1.5 mg/kg of caffeine (I), 2-10 mg/kg of morphine and 0.025-0.4 mg/kg of strychnine (II) into dogs and rabbits had no effect on the agglutination of erythrocytes by H⁺. The injection of 3-7 mg/kg of I into dogs and rabbits shifted the agglutination zone to the acid side. Injection of II in doses of 0.1-0.2 mg/kg into dogs and 0.25 mg/kg into rabbits shifted the agglutination zone to the alk side.
S. A. Kartala

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

The antagonistic influence of ions on the acid agglutination of erythrocytes. F. Ya. Berenshtein and M. I. Shkol'nik. *J. Physiol. U.S.S.R.* **22**, 848-853 (in German 855) (1937).—The inhibiting effect of cations on the acid agglutination of erythrocytes is in the order Li > Na > K > NH₄, and for anions SO₄ > Cl > NO₃ > I⁻. The inhibiting effect after the simultaneous addn. of 2 anions in glucose soln. is additive, but when 2 cations are added the effect may be less than that of the 2 cations separately or it may equal the sum of the 2 single effects. Antagonistic effects were observed for Li + Ca, Li + Mg, Li + Ba, Li + Na, Li + K, Li + NH₄, NH₄ + Na, NH₄ + Ba, NH₄ + Ca, Ba + Mg, Ba + Ca and Ca + Mg. An additive effect was observed for Na + Ca, Na + Mg, Na + Ba, Na + K, Ca + K, K + Mg, K + Ba and K + NH₄ + Na. NH₄Cl + MgCl₂ inhibits agglutination to a greater extent than NH₄Cl alone.

S. A. Karjala

AMSLA METALLURGICAL LITERATURE CLASSIFICATION

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1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9

The reactions between sugars and boric acid. F. Ya. Berenblit and A. P. Shpakovskii. *Ukrain. Khim. Zhurn.* 11, 481-483 (in German) 444-446 (1947); *J. C. S.* 4, 29, 2054^a. The reactions between H_2BO_4 and $NaBH_4$, and mannose, xylose, arabinose, dulcitol, amygdalin, and other glucosides were investigated. The degree of dissociation of H_2BO_4 is not affected by amygdalin but is raised by dulcitol, mannose, xylose, and arabinose. H_2BO_4 may be titrated to the end with alkali and phenolphthalein in the presence of at least 2 mols. of dulcitol or 8 mols. of arabinose per mol. of H_2BO_4 . H_2BO_4 has no effect upon the degree of rotation of sugars or upon the speed of mutarotation. $NaBH_4$ increases the speed of mutarotation of glucose, arabinose, and galactose considerably, but that of fructose shows no appreciable changes. In the presence of $NaBH_4$, the angle of rotation of monosaccharides decreases greatly. Thus for arabinose, glucose, galactose, and fructose, the drop is considerable, while for some galactose solns. having a $NaBH_4$ concn. of 0.10 and 0.20 mols. per L, the change is to the left provided the sugar concn. is not over 1.8 and 0.45%, resp. $Na_2B_4O_7$ has little effect upon the optical properties of disaccharides. Thus for maltose the angle of rotation does not change, for sucrose it decreases slightly, and for lactose it increases a little. Neither H_2BO_4 nor $Na_2B_4O_7$ have any effect upon the process of formation or properties of osazones. B. Z. Kauich

ence of $NaBH_4$, the angle of rotation of monosaccharides decreases greatly. Thus for arabinose, glucose, galactose, and fructose, the drop is considerable, while for some galactose solns. having a $NaBH_4$ concn. of 0.10 and 0.20 mols. per L, the change is to the left provided the sugar concn. is not over 1.8 and 0.45%, resp. $Na_2B_4O_7$ has little effect upon the optical properties of disaccharides. Thus for maltose the angle of rotation does not change, for sucrose it decreases slightly, and for lactose it increases a little. Neither H_2BO_4 nor $Na_2B_4O_7$ have any effect upon the process of formation or properties of osazones. B. Z. Kauich

Physical chemistry of avian erythrocytes. F. I. Berenshtein, D. I. Lyach and N. P. Bedrikovskaya. Russ. J. Physiol. 16, 530-40 (1933).—Duck erythrocytes suspended in aq. sucrose undergo agglutination at μH 5.9, goose erythrocytes at μH 5.3-5.6, and hen erythrocytes at μH 3.54-3.3; alkali and alk. earth salts inhibit agglutination in the order of Hofmeister's series. The rate of sedimentation of avian erythrocytes in their homologous plasma is $1/2-1/3$ that of horse erythrocytes; similar results are obtained for suspensions of horse erythrocytes in avian plasma, and of avian erythrocytes in horse plasma. In all cases the sedimentation rate is greater for plasma than for serum suspensions; it increases for avian and diminishes for horse erythrocytes when isotonic solns. of NaCl, CaCl₂, Na₂SO₄, glucose or sucrose are substituted for plasma. B. C. A.

Effect of sugars on the dissociation of boric acid. F. I. Bernstein and L. N. Aisenberg. *Ukrain. Khim. Zhur.* 8, 307-16(1938); cf. C. A. 24, 1088. Fructose (I) has practically the same effect as mannitol in augmenting the dissociation of H_2BO_3 (II); the magnitude of the effect is greatest with 2 mols. of I per mol. of II, and increases with the concn. Sucrose has no action, while that of maltose, lactose, glucose, erythritol and galactose increases in the order given, being, however, considerably less than that of I. R. C. A.

ASH SLA METALLURGICAL LITERATURE CLASSIFICATION

CLASS NUMBER
SEARCHED INDEXED

1-4 103-54

ACCESSION NR. AR012372

$\text{SiO}_2\text{-ZrO}_2\text{-Na}_2\text{O}$ system are produced by the stabilizing action of ZrO_2 , which strengthens the structural bonds of the glass lattice. The addition of a large amount of Na_2O does not reduce the chemical stability of the glass. The process of crystallization is accompanied by the formation of silicates; however, the degree of crystallization of the products is not sufficiently high, which apparently is due to the fact that ZrO_2 is not connected structurally with the other components of glass. The zirconium-bearing crystallized products have high chemical and thermochemical resistance and increased mechanical strength. These materials can be used for making acid-resistant plates and chemical apparatus. The search for new and more effective mineralizers will determine the course of future research on synthesizing materials containing zirconium dioxide (authors' abstract).

SUB CODE: GC, MI

ENCL: 00

JW
Card 2/2

1. 65202-03 - EWP(m)/EWP(e)/EWP(l)/EWP(b) - Pg-4 WH
ACCESSION NR.: A85013172 UR/0031/65/000/005/B064/B064

SOURCE: Ref. zh. Khimiya, Aba. 58425

AUTHOR: Bezenetskym, A. V.; Sentyurin, G. S.

TITLE: Producing transparent and quenched glass in a $\text{SiO}_2\text{-ZrO}_2\text{-Na}_2\text{O}$ system

CITED SOURCE: Tr. Mosk. khim.-tekhnol. In-ta im. D. I. Mendeleeva, vyp. 46, 1964, 70-74

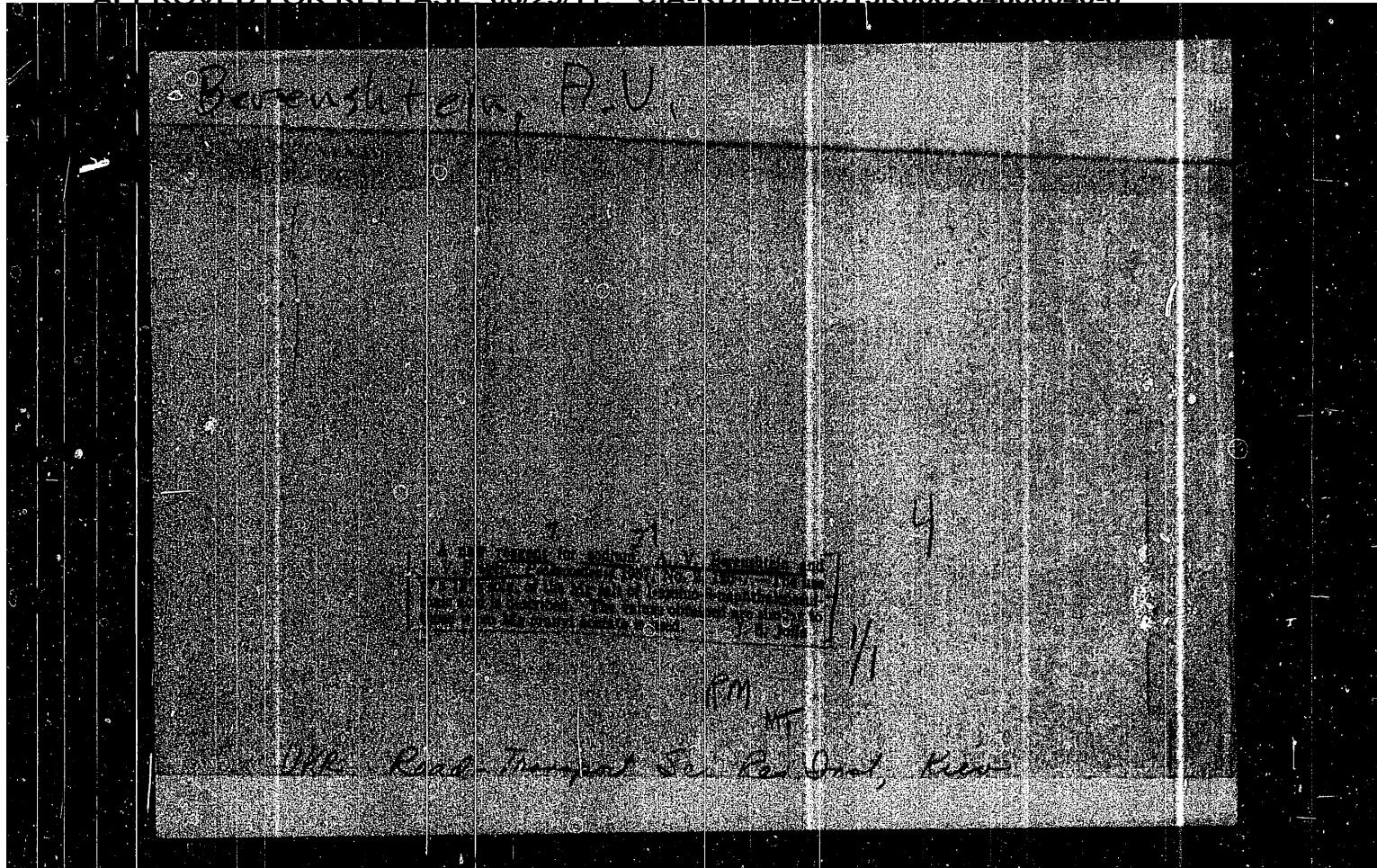
TOPIC TAGS: glass, zirconium, zirconium compound

TRANSLATION: The zone of glass formation and the zone of compositions possessing a considerable tendency toward crystallization in the $\text{SiO}_2\text{-ZrO}_2\text{-Na}_2\text{O}$ system were studied. Transparent zirconium glasses contain 45-75% SiO_2 , 12-30% Na_2O and up to 25% ZrO_2 ; the most resistant to crystallization are glasses with an O:Si ratio equal to or less than 2.4 and containing up to 20% ZrO_2 . Polyzirconium silicate glasses (greater than 20% ZrO_2) have a greater tendency toward crystallization when the O:Si ratio is equal to 2.6-3. Transparent polyzirconium glasses in the

Card 1/2

19
B

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BERENSHTEYN, A.L.; SMOLYAK, M.M.

"Transactions of the Central Asiaian Polytechnical Institute,
vol.7 1957." Reviewed by A.L.Berenshtein, M.M.Smoliak. Izv.
vys.ucheb.zav.; pishch.tekh. no.4:168-171 '59.
(MIRA 13:2)

(Sugar manufature)

BERENSHTEYN, A.F.; ASAUL, Z.N.

Culture of chlorella on the wastes of distilleries. Ferm. i
spirt.prom. 30 no.4:35-36 '64. (MIRA 18:12)

1. Institut botaniki AN UkrSSR.

BERENSmTEYN, A.F.; ASAUL, Z.I.

Utilization of the wastes of fermentation industries in the
cultivation of algae. Spirt.prom. 29 no.4:26-27 '63. (MIRA 16:5)

1. Institut botaniki AN UkrSSR.
(Distilling industries--By-products) (Algae)

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BERENSSTEYN, A.F.

"Continuous fermentation and cultivation of microorganisms".
Reviewed by A.F.Berenshtein. Spirt.prom. 28 no.2:43-45 '62.
(MIRA 15:3)
(Fermentation) (Micro-organisms)

BERENSSTEYN, A.F.; RED'KO, D.I.; CHATSKIY, P.A.

For further technological progress in the alcohol industry and
the liqueur and vodka industry. Spirit.prom. 28 no.2:5-7 '62.
(MIRA 15:3)

1. Kiyevskiy likerovodochnyy zavod (for Berenshteyn).
2. Kiyevskiy sovet narodnogo khozyaystva (for Red'ko).
3. Chernigovskiy spirtotrest (for Chatskiy).
(Distilling industries) (Liquor industry)

BERENSSTEYN, A.F.

"Alcohol technology" by D.N.Klimovskii, V.N.Stabnikova. Reviewed
by A.F.Berenshtain. Spirt.prom. 27 no.3:42-43 '61. (MIRA 14:4)
(Alcohol) (Klimovskii, D.N.) (Stabnikova, V.N.)

BERENSHTEYN, A.F.

"Ethyl alcohol" by V.N.Stabnikov and others. Reviewed by
A.F.Berenshtein. Spirit.prom. 26 no.7:46-47 '60. (MIRA 13:10)
(Ethyl alcohol) (Stabnikov, V.N.)

BERENSHTEYN, Aleksandr Filippovich; SIVOLAP, Ivan Kuz'mich; MURASHOVA,
O.I., red.; KISINA, Ye.I., tekhn.red.

[Full utilization of distillers' feed] Kompleksnoe ispol'zovanie
bardy spiritovykh zavodov. Moskva, Pishchepromizdat, 1960. 95 p.
(MIRA 13:12)

(Distilling industries--By-products)

BERENSSTEYN, A.F.; KHSHANOVSKIY, F.A.

Mechanization of the washing of yeast separator plates.
Spirt.prom. 25 no.8:39-40 '59. (MIRK 13:3)
(Yeast)

BERENSHTEYN, A.F.

"Continuous method of fermentation" by V.L. IArovenko. Spirt. prom.
25 no.6:42-44 '59. (MIRA 12:12)
(Fermentation) (IArovenko, V.L.)

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BERENSHTEYN, A.F.; BYKOVSKIY, V.K.

Steffen waste used as feeding stuff. Spirt, prom. 25 no. 4; 23-25
'59.

(MIRA 12:7)

(Distilling industries--By-products) (Feeds)

BERENSHTEYN, A.F.

Review of the book "Production of barley malt for fermentation by
G.N.Silin, A.G.Fedorov. Spirt.prom. 25 no.2:45 '59. (MIRA 12:3)
(Malt) (Rye) (Silin, G.N.) (Fedorov, A.G.)

AUTHOR: Berenshteyn, A.F. SOV/71-59-2-25/26

TITLE: Review of the Book by G.N. Silin, and A.G. Fedorov "Production of Rye Malt for Kvas-Making" (Retsenziya na knigu G.N. Silina, A.G. Fedorova "Proizvodstvo rzhannogo soloda dlya kvasovaniya")

PERIODICAL: Spirtovaya promyshlennost', 1959, Nr 2, p 44 (USSR)

ABSTRACT: After a brief description of the contents of the book, which deals with the entire processing, handling and storing of rye malt, the author gives a favorable comment on the book as a whole, with exception of a few critical remarks pertaining to certain information which the book lacks and of other remarks pertaining to obsolete processing methods and machinery which have been superseded. The author also does not agree with certain recommendations given in the book, which are contrary to his experience, but concludes that the book should prove of interest to workers in the malt and alcohol industries.

Card 1/1

Structure of Management of a Distillery

SOV/71-59-2-7/26

replaced by one technologist. Laboratories should be relieved of most routine checks, such as taking temperatures, etc, which work should be performed as far as possible by the sections themselves. A staff of four employees - a supervisor, two chemists and an assistant should be in a position to cope with the entire work load in a small and medium size distillery. It is recommended that in certain plants a special scientific research laboratory be established with a designing bureau for examining and introducing new and improved production processes and new machinery with a view to eliminating waste and bringing down cost of production.
There are 1 table and 3 charts.

Card 2/2

SOV/71-59-2-7/26

AUTHORS: Berenshteyn, A.F., Red'ko, D.I. and Chatskiy, P.A.

TITLE: Structure of Management of a Distillery (O strukture upravleniya spirtovym zavodom)

PERIODICAL: Spirtovaya promyshlennost', 1959, Nr 2, pp 24-28 (USSR)

ABSTRACT: The existing structure of management of a distillery is top-heavy, in as much as one qualified worker (engineer, technician) counts for every 5 workmen. To approach the question of rational management it is necessary to divide distilleries in 4 groups in accordance with their capacity - small (600 dkl) medium (up to 1,200 dkl), large (up to 2,000 dkl), extra large (over 2,100 dkl of daily output). Corresponding with these groups, the article discusses 3 standard charts of administrative organizations, viz. for a small, a medium and a large size plant, the principle of the organization remaining the same in each case. Directly responsible to the manager are: the administration chief, the head mechanic, the head technologist, the head of the laboratory, the alcohol store-keeper and the chief accountant. Distilleries of group 1 and 2 should abandon the departmental system headed by foremen; in larger distilleries of group 3 and 4, two or three foremen should be

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FERTMAN, G.I.; BERENSHTEYN, A.F.

Present-day methods for the cultivation of yeast. Spirt. prom.
24 no. 6:23-27 '58. (MIRA 11:10)
(Yeast)

BERENSHTEYN, A.F.

Reviews of the collection "Alcohol, liquor, and vodka industries,"
collection no. 2, and the Scientific and Technical Information
Bulletin of the All-Union Scientific Research Institute of the
Distilling Industry. Spirt. prom. 24 no. 4:37-38 '58. (MIRA 11:?)
(Distilling industries)

BERENSHTEYN, A.F.; RED'KO, D.I.; CHATSKIY, P.A.

Raising the food value of grain-potato stillage. Spirit. prom.
24 no. 3:18-19 '58. (MIRA 11:6)
(Distilling industry--By-products) (Feeding and feeding stuffs)

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BERLINSHTEYN, A.I.

MAMUNYA, A.U.; BERMENSHTEYN, A.F.; BARANOVSKAYA, K.F.

Metering device for stillage. Spirit. prom. 24 no. 2:13-14 '58.
(Distilleries--Equipment and supplies) (MIRA 11:3)

BERENSHTEYN, A.F.

BUJNITSKIY, S.M.; BERENSHTEYN, A.F.

Utilizing molasses waste. Spirit. prom. 24 no.1:28 '58.

(MIRA 11:3)

(Distilling industries--By-products)

(Insect baits and repellents)

Berezenshteyn, A.F.

BERENSHTEYN, A.F.

"Alcohol and liquor-vodka industry". Spirt.prom. 23 no.6:47-48

'57.

(MIRA 10:12)

(Distilling industries)

BERENSHTEYN, A. F.

Scientific and technical bulletin of the All-Union Scientific
Research Institute of the Alcohol, Liqueur and Vodka Industries.
Spirt. prom. 23 no. 5:42-43 '57. (MLRA 10:8)
(Alcohol)

BERENSHTEYN, A.F.

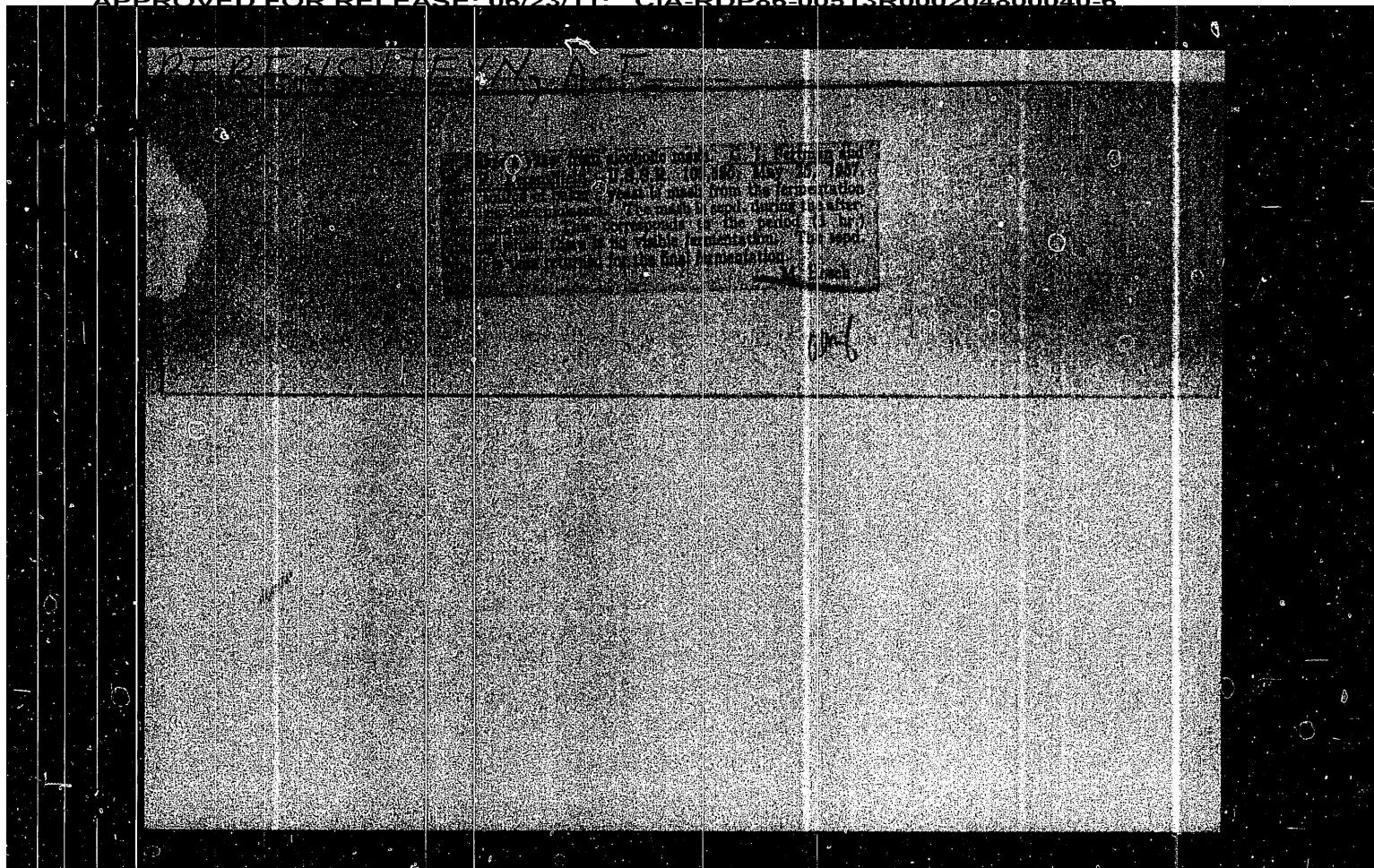
Measures for further improvement of the quality of baker's yeast
made by alcohol plants. Spirt. prom. 2) no. 5:11-12 '57. (MERA 10:2)
(Yeast)

ASHKINUZI, Z.K., rukovoditel' brigady; BERENSHTEYN, A.F.; KUZNETSOV, N.M.; RABINOVICH, B.D.; CHATSKIY, P.A.; SIDORENKO, D.P.; KOVALEVSKAYA, A.I., red.; YAROV, E.M., tekhn.red.

[Continuous thermal processing of starchy raw materials] Nepre-
ryvnaia teplovaia obrabotka krakhmalistogo syr'ia. Moskva, Pishche-
promizdat, 1957. 59 p.
(MIRA 12:4)

1. Kiyevskiy filial Vsesoyuznogo nauchno-issledovatel'skogo insti-
tuta spirtovoy promyshlennosti (for Ashkinuzi).
(Distilling industries)

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VERGOLDE TEKEN

Franklin observed into
the river, saw
the fish swimming
and the trout

BERENSHTEYN, A.F.

Use of carbon dioxide in agriculture. Spirt.prom. 22 no.2:23-24 '56.
(MLRA 9:8)

1. Glavspirt Ministerstva promyshlennosti prodovol'stvennykh
tovarov.

(Carbon dioxide) (Photosynthesis)

BERENSHTEYN, A.F.

✓ Continuous cooking of starch-containing raw material
for the purpose of size reduction. Z. V. Atkinus, B. D.
Rabinovich, A. F. Berenshteyn, and P. A. Chatskii (All-
Union Sci. Research Inst. Alcohol Ind., Kiev). *Spirtovaya*
Prav. 22, No. 1, 4-10(1950).—Equipment, like crushers,
feeders, mixers, and filters, used for the prepn. of fermenta-
tion masses from potatoes, rye, and wheat are illustrated.
Values are given for the amts. of H₂O and the temps. at
which those materials are treated, the wts. worked up/hr.,
and the yields of EtOH in correct runs. Werner Jacobson

4

RED'KO, D.I.; MOLDAVSKIY, P.Yu.; BERENSHTEYN, A.F., spetsred.; KOVALEVSKAYA, A.I., red.; KISINA, Ye.I., tekhn.red.

[Progressive practices of the Martynov Alcohol Plant] Perekopovoi opyt Martynovskogo spirtovogo zavoda. Moskva, Pishchepromizdat, 1956. 47 p.

(Martynov--Distilling industries)

(MIRA 11:12)

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BERENSSTEYN, A.F.

Dissemination of progressive technology in the Ministry of the Food Products Industry of the U.S.S.R. ("Alcohol, liqueur, and vodka industry." Reviewed by A.F. Berenshteyn). Spirit.prom. 21 no.4:38-39 '55. (MLRA 9:3)
(Distilling industries--Equipment and supplies)

BERENSHTEYN, A.F., PASHIN, P.A.

Method for speeding up the wetting and germination of grain.
Spirt.prom. 21 no.4:26-29 '55. (MLRA 9:3)

1. Glavspirt (for Berenshteyn); 2. Khar'kovskiy spirtovyy trest
(for Pashin)
(Malt)

BERENSSTEYN, A.F.; IS'YANOV, S.Z.

Use of molasses by-products for fattening cattle. Spirt.prom. 21
no.1:31-32 '55. (MIRA 8:5)

1. Ukrainskiy likero-vodochnyy trest (for Berenshteyn). 2. Ukrzagetskot (for Is'yanyov)
(Cattle--feeding and feeding stuffs)
(Distilling industries--by-products)

BERENSHTEYN, A.

IS'YANOV, S.: BERENSHTEYN, A., inzhener.

Experience in feeding livestock with grain molasses. Mias. ind.
SSSR. 25 no.5:43-44 '54. (MLRA 7:11)

1. Ukrainskaya skotzagotovitel'naya kontora (for Is'yanov)
2. Kiyevskoye otdeleniye Glavspirta (for Berenshteyn)
(Cattle--Feeding and feeding stuffs)

BERENSHTYN, A.F.

Use of waste products of distilleries. Spirt.prom.20 no.1:17-18 '54.
(MIRA 7:5)

(Distilling industries--By-products) (Liquor industry--By-products)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

BERENSTEIN, A.F.

Slopes storage and delivery system in a liquor plant. Spirit.prom. 20
no.3:22-24 '54. (MLRA 7:10)
(Liquor industry--By-products)

BERENSHTEYN, A.F.

✓ Effect of stirring on the intensity of fermentation of sugar solutions. A. F. Berenshteyn and B. M. Nakhmanovich. *Trudy Kiev. Polita. Vsesoyuz. Nauch.-Issledovatel. Inst. Speriment. Prom.* 1953, No. 1, 88-101; *Referat. Zhar., Khim.* 1954, No. 50842. Laboratory expts. showed that stirring hastened appreciably the fermentation of sirups, particularly during the finishing stages when alc. is formed from intermediate products of sugar decompn. It also increased the yield of alc. because of more thorough sugar fermentation and did not affect the multiplication of yeast or its quality. Periodic shaking had a similar effect but to a much lesser degree. The beneficial effect of stirring is attributed to the removal of excess CO₂ from the mash, equal distribution of yeast, and the products of their activity and nutrients in the fermented liquid. M. Hirsch

✓ Continuous process for production of alcohol from syrup.
A. P. Berenstein, D. I. Skoblo, and S. P. Oul'yaev. *Trudy
Ker. Pitala Vsesoyuz. Nauch.-Issledovatel. Inst. Spiriloval
Prom.* 1953, No. 1, 60-87; *Referat Zhur., Khim.* 1954, No.
50841.—In the outlined process the 1st fermentation tank is
used for growing yeast. The continuous fermentation is
carried out in 2 stages, in the 1st of which, comprising 5-7
tanks, the greater part of the sugar is fermented; the fer-
mentation is finished in successive tanks which are of smaller
capacity. Through these tanks the mash is circulated for-
cibly at a rate 3-4 times faster than in the 1st stage. In
this process the syrup is acid-sterilized in place of steam.
This method of production gave a higher yield of alc. per
ton of starch and resulted in considerable economies of water,
steam, antifoam agents, and manpower. M. Hosh

2

BERENSHTEYN, A.P.; NAKHMANOVICH, B.M.

Effects of mixing on fermentation activity of yeast cells, *Saccharomyces cerevisiae*, strain Ya, in nutrient molasses mash. *Mikrobiologiya* 22, 179-84 '53. (MLRA 6:3)
(CA 47 no.22:12750 '53)

1. All-Soviet Research Inst. Alcohol Ind., Kiev.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

PROCESSES AND PROPERTIES INDEX

Dephlegmator with horizontal tubes. A. L. Malchenko
and A. F. Berenshtein. Russ. 80,014, Nov. 30, 1939.
Construction details.

ASM-15A METALLURGICAL LITERATURE CLASSIFICATION

CLASSIFICATION

121109 84

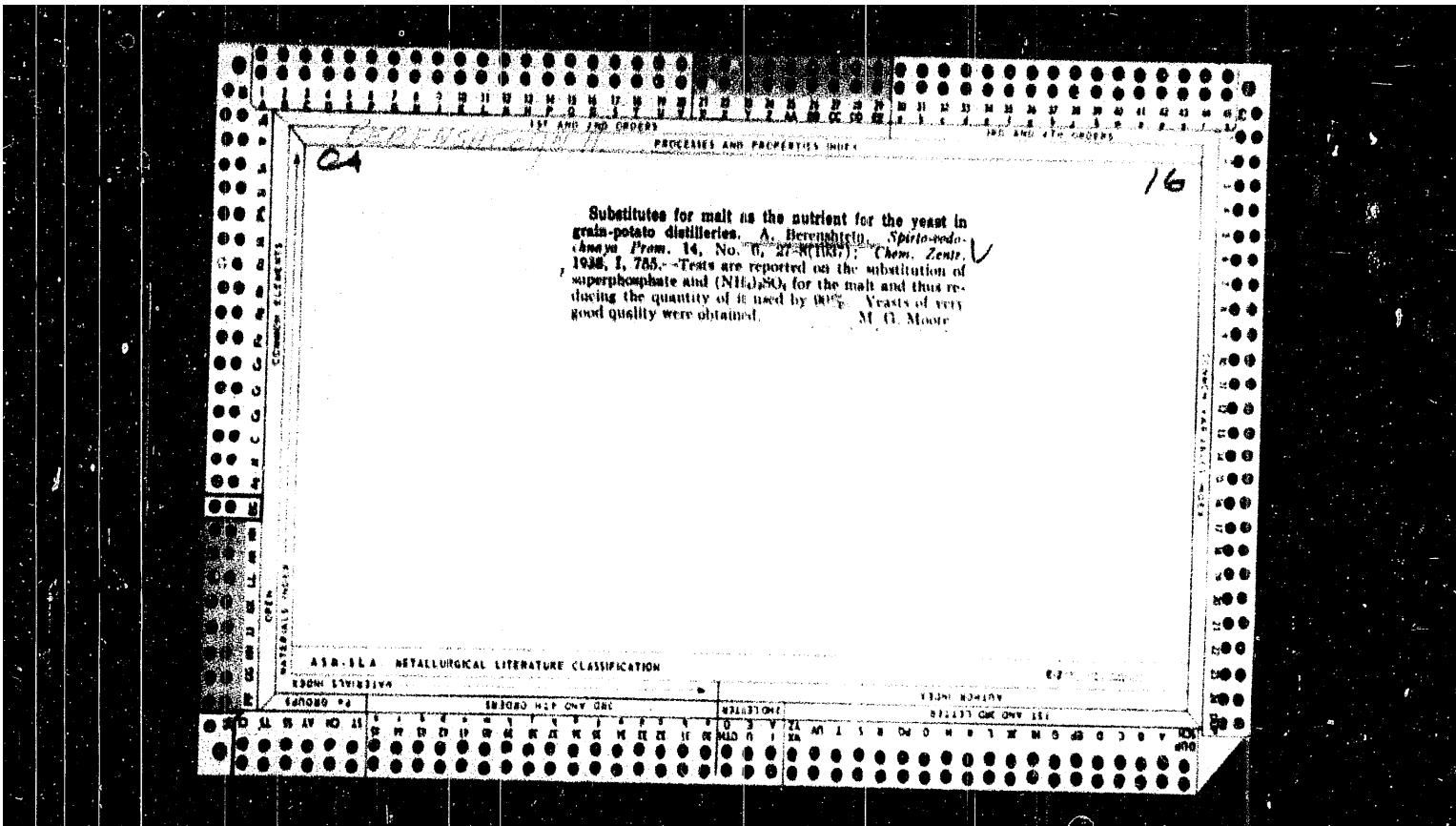
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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6



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CA 16

PROCESSES AND PROPERTIES INDEX	
1	Alcohol. A. P. Bernstein and N. M. Kuznetsov. Russ. 39,727, Nov. 30, 1934. The waste from starch manuf., such as potato pulp, is heated to 80° to avoid saccharification and malt is added and fermentation conducted in the usual manner.
AVAILABILITY	
METALLURGICAL LITERATURE CLASSIFICATION	
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BERG, S.L., polkovnik; VOROB'YEV, V.I., kapitan pervogo ranga; GIL'EO, G.M., kapitan pervogo ranga; ANANCHENKO, A.A.; BALAKSHINA, M.M.; BANNIKOV, B.S., kapitan vtorogo ranga; BAKHTINA, G.F.; BERENSHTAM, N.V.; BUTYRINA, N.Ya.; VOROB'YEV, V.I., kapitan pervogo ranga; GASS, I.P.; GINNYSH, N.S.; GLADIN, D.F., polkovnik; GOLOVANOVA, L.G., kand. ist. nauk; GOLUIEVA, Z.D., kand. filol. nauk; GONCHAROVA, A.I.; ZANADVOROVA, R.N.; IVANOVA, N.G.; KARAMZIN, G.B.; KOVAL'CHUK, A.S.; KRONJDOVA, V.A.; LITOVA, Ye.I.; MOLCHANOVA, T.I.; OKUN', L.S.; POCHEBUT, A.N.; RAYTSES, V.I.; SAVINOVA, G.N.; SEMICHKINA, T.I.; SKRYNNIKOV, R.G., kand. ist. nauk; FUR'YEVA, I.I.; CHIZHOVA, N.N.; YASINSKAYA, L.F.; GLADIN, D.F., polkovnik; LABETSKIY, Ye.F., pod-polkovnik; LEBEDEV, S.M., kapitan pervogo ranga; ORDYNSKIY, N.I., kapitan pervogo ranga; NADVODSKIY, V.Ye., podpolkovnik; DEMIN, L.A., inzh.-kontr-admiral, glav. red.; FRUNKIN, N.S., polkovnik, zam. otv. red.; LEVCHENKO, G.I., admiral, red.; BAKHTINA, G.F., tekhn. red.

[Naval atlas] Morskoi atlas. n.p. 1zd. Glavnogo Shtaba Voenno-Morskogo Flota. Vol.3. [Naval history] Voenno-istoricheskii. Pt.1. [Text for the maps] Opisaniiia k kartam. 1959. xxii, 1942 p. (MIRA 15:5)

1. Russia (1923- U.S.S.R.) Ministerstvo oborony.
(Naval history)

BERENSHTEYN, A.A.

TOPOLYANSKAYA, S.I.; LEV, M.S.; LURINA, Ye.I.; BERENSHTEYN, A.A.;
GERASIMOV, M.A.

Data on immunization against influenza with Zhdanov's living vaccine.
Zhur.mikrobiol.epid. i immun. no.9:16-20 § '54. (MLRA 7:12)

1. Iz zdravotdela Pervomaykogo rayona Moskvy (zav. zasluzhennyj vrach
RSFSR D.A.Parfenenko) i sanitarno-epidemiologicheskoy stantsii Per-
vomayskogo rayona (glavnnyj vrach O.V.Chishova).

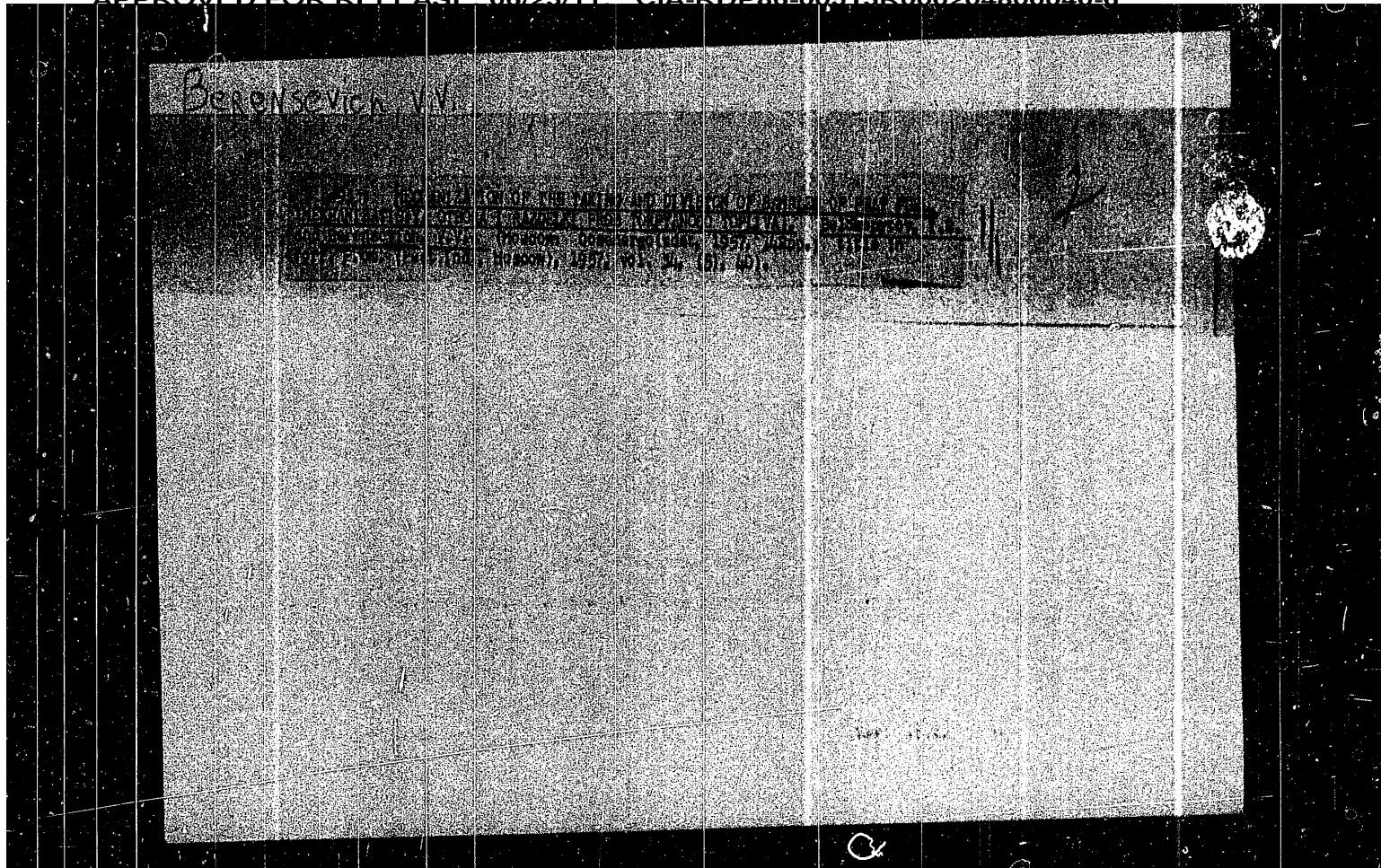
(INFLUENZA, prevention and control,

Russia, mass vacc. with living vaccine)

(VACCINES AND VACCINATION,

influenza, mass vacc. with living vaccine)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6



Experimental Nuclear Reactor "Eva"

P/035/60/000/017/001/001
A076/A026

reservoir is filled with distilled water which acts as coolant, shield and reflector. It stands on a cast-steel plate and is enclosed by 2.5-meter-thick concrete and closed with a cast iron lid. About 900 m³/h of water, pumped by two eccentric pumps made of special acid-proof steel, are needed for cooling purpose. The secondary cooling system requires about 350 m³/h of water. Hot-chambers are located in the basement where a special lathe and a crane are installed. There are 6 photographs and 5 figures.

ASSOCIATION: Instytut Badan Jadrowych (Institute of Nuclear Research)

Card 3/3

Experimental Nuclear Reactor "Eva"

P/035/60/000/017/001/001
A076/A026

physics and radiation as well as for the production of isotopes. The fuel elements are rods 6 mm in diameter and 500 mm long, containing 10% of U²³⁵. The rods are enclosed in a 2 mm thick aluminum casing. Each fuel section contains 16 fuel rods, which are placed in two plates containing leading and water-flow holes. The rods in sections, are protected by aluminum sheet equipped with hooks to facilitate transportation. Due to the arrangement of regulating section and safety rods, three types of shapes were adapted: square, square with two cut-off edges and square with three cut-off edges. As a result the spacing of the fuel rods ranges from 13.5 to 17.5 mm. The fuel sections are placed 71.5 mm apart inside the core, and proper setting is ensured by two lattices made of flat aluminum bars, which are enclosed in an aluminum cylinder, known as the separator. The maximum number of sections which can be loaded is 51. The total load consists of 816 fuel rods, containing about 65 kg of uranium, of this 6.5 kg of U²³⁵. At the beginning of the operation only 24 sections are loaded and the rest are filled out with fillers. In addition to control and safety rod channels, 8 isotope irradiation channels and another short irradiation channel lead through the pile. The channels are filled with water and only the short irradiation channel is dry. The reactor's reservoir with an outer diameter of 2,300 mm and a height of 5,700 mm is made of aluminum alloy and its interior is divided into three cylindric sections. The

Card 2/3

P/C35/60/000/017/001/00
A076/A026

AUTHOR: Berens, Tadeusz, Master of Engineering

TITLE: Experimental Nuclear Reactor "Eva"

PERIODICAL: Przeglad Mechaniczny, 1960, No. 17, pp. 510 - 517

TEXT: The author describes the experimental nuclear reactor "Eva" built in Poland two years ago at Swierk near Warsaw. The main reactor building contains also primary pumps, burnt-out fuel dumps, a special sewage system, ventilators, remote-controlled equipment, a dosimeter shelter with central dosing panel, air sampling pumps, distilling equipment, machine shop, offices, library, lecture room, laboratory, stores, dressing room, disinfection chamber and social equipment. Ventilating equipment, secondary pumps, cooling basin and tanks for radioactive waste are located outside the main building. Basic characteristics of the "Eva" nuclear reactor: thermal power 2,000 kw; max. electron flux 2×10^{13} neutr/cm² sec; uranium fuel enriched to a value of 10% U²³⁵; quantity of fuel at the beginning of operation increased due to water temperature and origination of Xenon-135 to 4 kg; ordinary water is used as coolant, shield and reflector; minimum critical mass of U²³⁵ with fuel rods is about 3 kg. The reactor is destined for research into ✓

Card 1/3

BERENS, T.

Clamps. P. 63 MECHANIK Warszawa (Stowarzyszenia Inżynierów i Techników Polskich) Vol. 28, no. 2, February 1955

SOURCE: EEAL IC Vol. 5, no. 7, July 1956

Acclimatization of the Siberian Red Ferret (Cont.) 14-37-6-12589

of 1953. The Siberian red ferret has no commercial value, but it
is hunted quite extensively.
Card 2/2

L. Dinesman

BERENS, K. P.

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,
14-57-6-12589
p 121 (USSR)

AUTHORS: Berens, K. P., Yanushevich, A. I.

TITLE: Acclimatization of the Siberian Red Ferret in Kirghizia
(Materialy po akklimatizatsii kolonka v Kirgizii)

PERIODICAL: Akklimatiz. pushnykh zverey v Kirgizii. Frunze, 1956,
pp 113-114

ABSTRACT: In January 1941, 26 Siberian red ferrets were released
on the northern slope of the Terskey-Alatau near Uch-
Bulak. In 1942 and 1943, three young ferrets were
caught some 40 to 50 km away. Tracks belonging to the
Siberian red ferret were discovered at 5 km away on a
trail in the bottom of a spruce forest valley. The
number of tracks decreased sharply in the valley near
the places where the animals had been released, and
four tracks were counted in two valleys in the winter

Card 1/2

Developments of Raccoon Dogs (Cont.)

44-57-6-12586

recommend that commercial licenses be granted to trap these animals along the banks of the Issyk-Kul'. A map showing their distribution around Lake Issyk-Kul' is included.
Card 2/2

L. D.

BERENS, K. R.

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,
14-57-6-12586
p 121 (USSR)

AUTHORS: Berens, K. R., Yanushevich, A. I.

TITLE: Developments of Raccoon Dogs (Nyctereutes procionoides
Gray) Since Their Release [Kozul'taty vypuska yenoto-
vidnoy sobaki (Nyctereutes procionoides Gray)]

PERIODICAL: V sb: Akklimatiz. pushnykh zverey v Kirgizii, Frunze,
1956, pp 75-82

ABSTRACT: Six female and nine male raccoon dogs were released
in 1944 in the northern Semenovka region near Issyk-
Kul' Lake. In 1952 these animals were found along
the east and northeast shores of the lake and on the
lower slopes of valleys running into it. Altogether
200 were found in an area 80 to 100 sq km. An attempt
to introduce them into regions where the snow cover
exceeded 50 cm was not successful. The authors

Card 1/2

BERENS, K.; SHUGAR, D.

Ultraviolet absorption spectra and structure of halogenated uracils
and their glycosides. Acta biochim. pol. 10 no.1:25 '63.

1. Institute of Biochemistry and Biophysics, Polish Academy of Sciences,
Warszawa.

(NO SUBJECT HEADINGS)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

BERENS, J.

"An Agent for Washing Woolen Textures." P. 337, (PRZEMYSŁ ZOLNY I SPOŻYWCZY,
Vol. 8, No. 9, Sept. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions,(EEAL), LC, Vol. 4.
No. 1, Jan. 1955 Uncl.

BERENS, J.

Soft soap. P. 257. (PRZEMYSŁ ROLNY I SPOŻYWCZY, Vol. 8, No. 7, July 1954,
Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec.
1954, Uncl.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

BERENS, JULIAN

V Enthlaffing agents for margarine. Julian Berens (Zaklad
Detergentow, GIPIRS, Warsaw). Prace Szczedz. Inst.
Poznaniotek. Akademii i Spowietcza 4, No. 1, 19-43 (1954).
(English summary).—A review with 31 references.
Werner Jacobson

BERENS, J.

3008

Berens, J. Margarine Emulsifying Agent.

564.3.032.2

"Emulgator dla margaryny" (Prace Gl. Inst. Przem. Roln. i Spot. No. 1) Warszawa, 1954, WPL, 24 pp., 10 figs., 15 tabs.

The production of five types of margarine emulsifying agents was examined and worked out, a part of them possessing the combined properties of stabilizing the margarine emulsion of the W/O type and of giving the margarine its anti-spattering properties. It was confirmed that in the production of margarine emulsions the best results are obtained with an emulsifying agent, consisting either of a solution of a technical glicerolmonostearate in an autoxidised and polymerised semi-drying oil (soya-bean oil), or of a mixture of incomplete polyglycerol esters of stearin. A new explanation is advanced and justified of the action of factors which cause in margarine the formation of a W/O type emulsion and lack of spattering properties during frying in this emulsion. It was observed that the lack of spattering properties in butter or margarine is caused by the presence of emulsifying agents which condition the formation of an O/W emulsion under the influence of high temperature at the moment of decomposition of the basic W/O emulsion. The O/W emulsion evolved binds the water and a small quantity of fat; falling to the bottom of the vessel it foams and prevents the spattering of fat. The surface of the incomplete glycerol stearin esters and polyglycerols is represented diagrammatically. In relation to the chemical structure of the particular compounds. The positions of the products obtained are shown on the diagram together with other emulsifying agents, examined only theoretically. The relation between the surface-activity of these products and their chemical composition are demonstrated.

126-5-3-17/31
On Accelerating the Ageing of Alloys of Aluminium with Magnesium
Under the Influence of Small Admixtures of Silver and Zinc.
(On the Causes of the Influences of Small Admixtures on the
Kinetics of Ageing of Alloys III)

There are 9 figures, 5 tables and 15 references, 7 of
which are Soviet, 3 English, 5 German.

ASSOCIATIONS: Ural'skiy gosudarstvennyy universitet imeni
A. M. Gor'kogo (Ural State University imeni A.M. Gor'kiy)
Sverdlovskiy filial VNIIM (Sverlovsk Branch of VNIIM)

SUBMITTED: July 17, 1957

- : 1. Aluminum-magnesium alloys--Aging 2. Silver--Metallurgical effects
3. Zinc--Metallurgical effects

Card 6/6

126-5-3-17/31
On Accelerating the Ageing of Alloys of Aluminium with Magnesium
Under the Influence of Small Admixtures of Silver and Zinc.
(On the Causes of the Influences of Small Admixtures on the
Kinetics of Ageing of Alloys III)

to the intersection of the conode passing through the point of the composition of the alloy with the isotherm delimiting the phase region which encloses the composition of the alloy, and not the solubility which corresponds to the intersection of the straight line passing through the point of the composition of the ternary alloy parallel to the side of the concentration triangle. If this isotherm is intersected from the side of the concentration triangle at an acute angle and has a large length, then even a small admixture may bring about appreciable change of the saturation of the solid solution. If the angle of the intersection of the isotherm from the side of the triangle is large and the length of the isotherm is small, even a large admixture will have little influence on the saturation of an ageing alloy. In this second case a change of the kinetics of ageing under the influence of admixtures can be due to the effect of internal adsorption.

Card 5/6

126-5-3-17/31
On Accelerating the Ageing of Alloys of Aluminium with Magnesium
Under the Influence of Small Admixtures of Silver and Zinc.
(On the Causes of the Influences of Small Admixtures on the
Kinetics of Ageing of Alloys III)

admixtures and also analysis of literary data on the diagram of state of the ternary system Al-Mg-Zn indicates that the observed acceleration in ageing cannot be attributed to the intensification of the total saturation of the solid solution with Mg in presence of a small admixture of zinc (it increases altogether only by 0.2 to 0.3% Mg). Apparently, this acceleration is due to a large extent to internal adsorption of zinc on the periphery of transient formations in the decomposing solid solution and also on the periphery of separating out crystallites of the excess phase. The influence of silver admixtures is similar. In judging the mechanism of the influence of small admixtures of a third component on the kinetics of decomposition of a saturated binary solid solution, it is necessary to take into consideration the character of the isotherms and of the conodes on the diagram of state of the respective ternary system. Thereby, the solubility value is important which corresponds

126-5-3-17/31

On Accelerating the Ageing of Alloys of Aluminium with Magnesium
Under the Influence of Small Admixtures of Silver and Zinc.
(On the Causes of the Influences of Small Admixtures on the
Kinetics of Ageing of Alloys III)

Al-Mg alloys. The chemical compositions of the alloys used in the experiments are entered in tables, p.517. In Fig.1 the changes are graphed of the parameter of the crystal lattice of a solid solution as a function of time for an ageing temperature of 250°C; Fig.2 gives similar graphs for an ageing temperature of 300°C. In Fig.3 the dependence is graphed of the parameter of the crystal lattice of a solid solution on the concentration of the alloys. Table 5 gives the values of the lattice parameter of the phase T and of the solid solution at 300°C. The graphs Figs.6-9 contain the results of additional investigations of ageing in the systems Al-Mg-Ag and Al-Mg-Zn-Ag. By means of the method of measuring the changes in the lattice parameter of a decomposing solid solution with ageing time, it was established that admixtures of 0.2 to 1.0% zinc and silver accelerate the ageing of Al-Mg alloys. Analysis of experimental data on the solubility of Mg in Al in presence of zinc

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126-5-3-17/31
On Accelerating the Ageing of Alloys of Aluminium with Magnesium
Under the Influence of Small Admixtures of Silver and Zinc.
(On the Causes of the Influences of Small Admixtures on the
Kinetics of Ageing of Alloys III)

due to internal adsorption. In earlier work (Refs.1-3), this problem was investigated on alloys of the solid solution type of copper in aluminium with admixtures of zinc or silver and conclusions were derived on the horophilic nature of these admixtures relative to aluminium base solid solutions and on the adsorptional nature of the influence on the decomposition of saturated solid solutions of copper in aluminium. Conclusions on the horophilic nature of admixtures of zinc and Ag relative to Al were also derived in later work of the authors (Ref.4). For investigating further this problem, alloys of the binary system Al-Mg were chosen. This system is the basis of numerous important ageing engineering alloys. As admixtures Zn and Ag were taken for which it is possible to assume that they are horophilic relative to the aluminium solvent. In earlier work (Ref.5) it was found that small admixtures of zinc have an accelerating influence on the ageing of

BORENOVA, I. P.

AUTHORS: Arkharov, V. I., Borenova, I. P. and Magat, I. M. 126-5-3-17/51

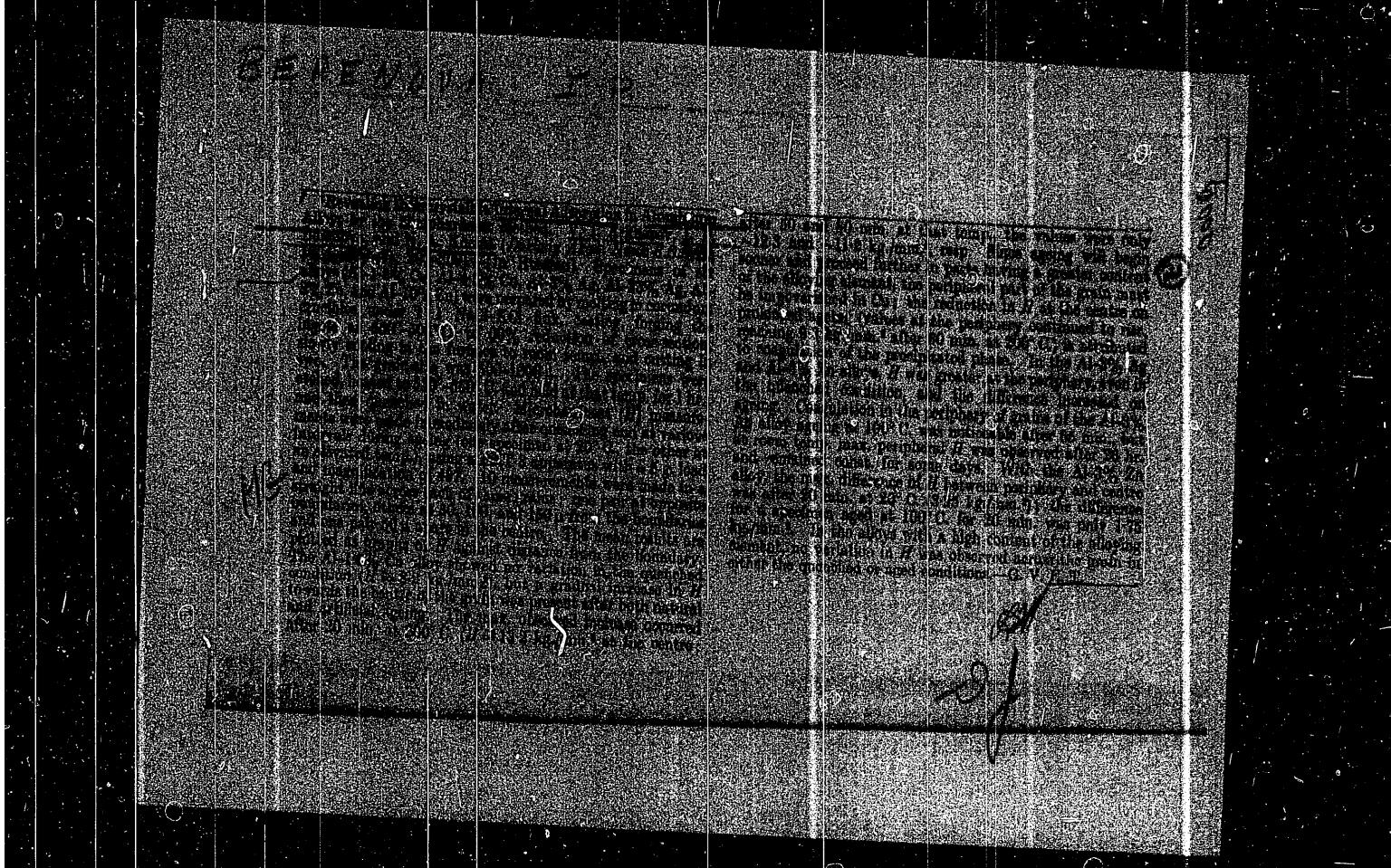
TITLE: On Accelerating the Ageing of Alloys of Aluminum with Magnesium Under the Influence of Small Admixtures of Silver and Zinc (Ob uskorenii protsesса старения сплавов алюминия с магниевым под влиянием малых примесей серебра и цинка) (On the causes of the influences of Small Admixtures on the Kinetics of Ageing of Alloys III) (K voprosu o prichinakh vliyanii malykh primezey na kinetiku stareniya splavov. III)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol 5, № 3, pp 515-526 (USSR)

ABSTRACT: Ageing of the alloys is subjected to the influence of admixtures. The selection of admixtures is generally based on empirical data. For a scientifically justified approach to this problem it is necessary to study the mechanism of the influence of the admixtures on the decomposition of saturated solid solutions. There is reason to assume that this mechanism is complicated. In absence of a sufficiently strong change in the solubility, the influence of admixtures on ageing may be

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6



GALIMOV, M.D.; BABADZHAN, A.A.; BERENOV, S.V.; TIMOSHIN, D.Ya.; SAVIK, A.Ya.

Converter dust screen with water cooling. Biul. TSIIN tsvet. met.
no.4:31-32 '58. (MIRA 11:5)
(Converters) (Dust collectors--Cooling)

137-58-6-11953

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 110 (USSR)

AUTHOR: Berenov, S.V.

TITLE

On the Process Procedure at the Middle Urals Copper Smelter
Considered in Terms of Conversion to Treatment of the Copper-
and-zinc Ores of the Degtyar Deposit (O tekhnologicheskoy
skhemie sredneural'skogo medeplavil'nogo zavoda v svyazi s
perekhodom na pererabotku medno-tsinkovykh rud Degtyar-
skogo mestorozhdeniya)

PERIODICAL: Tr. i materialy. Ural'skiy n.-i. proyektn. in-t medn. prom-
sti, 1957, Nr 2, pp 397-410

ABSTRACT:

Two combined treatment procedures are compared: 1. Dressing of the ore by selective copper-and-zinc flotation with treatment of the Cu-Zn intermediates by whatever procedure appears optimal, and of the Cu concentrates by the procedure: roasting - smelting - Bessemer blow of the mattes. 2. Dressing of the ore by combined copper-and-zinc flotation with treatment of the combined concentrate on the pattern: deep roast - reverberatory smelting - Bessemer treatment of mattes and fuming of the Zn slags to extract the Zn from them. The 2nd procedure enjoys considerable advantages over the 1st. G.S.
1. Copper--ores--Processing 2. Zinc ores--Processing 3. Ores--Flotation

Card 1/1

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

The hydrometallurgy of low grade nickel ores. N. N. Gribushkin, S. V. Petreny and A. K. Shirova. Ural Geosudarst. Nauch. Izdatelstv. Tsvetnaya Metal., Vsesoyuz. Nauch. Izdatelstv. Rabot No. 1, 74 Sovzgiz 1955. The ores are treated with H_2SO_4 , dried and heated at about 700°. Extraction with hot H_2O removes Ni along with Fe and Al which are pptd. with $CaCO_3$. The Ni is pptd. with Ni_2S . Individual ores require some modification of this general procedure. H. M. Lester.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800040-6

Zinc-copper fusions and their fuming. V. I. Smirnov
and S. V. Byrenov. Ural'skiy Gornodar' Nauch.-Issledo-
vatel' Inst. Tsvetnykh Metal., Sharmik Nauch.-Issledovatel'nyi
Rezerv No. 1, 5-24 (1935). Cu-Zn residues contg. ZnS
and Fe₂O₃ are heated with C at 1250°. Unless the Fe₂O₃ is
present, C will not properly reduce the ZnS. Good sepn
of fume Zn is thus obtained. H. M. Leicester

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Strength Rating of Machine Elements (Cont) SOV/2006

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. Strength Rating of Machine Elements (Cont)

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machine parts for fatigue life was considered. This method consists basically of a differentiated approach to the choice of admissible stresses (depending on the number of load cycles) which make possible determination of the estimated fatigue life of parts allowing a sufficient safety coefficient. In the second part machine parts are analyzed for strength allowing for transformation of the kinetic energy of moving parts into potential energy of deformation. The inapplicability of the Castigliano theorem for determination of the deformation of elements of a dynamic system is shown, the principle of minimum work is formulated, and theorems permitting the calculation of dynamically indeterminate problems are demonstrated. Practical experiments verify the theoretical deductions presented, some of which, however, need further verification. The author of this book was a leading designer in heavy industry. The following personalities are mentioned: N.N. Afanas'yev (statical theory of fatigue strength), D.N. Reshetov, S.V. Serensen, L.A. Kozlov (restricted fatigue life in small cycle-values), Professor V.N. Treyyer (necessity of a new approach to the fatigue strength calculation of machine parts). There are 64 references: 63 Soviet, and 1 German.

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PHASE I BOOK EXPLOITATION

SOV/2006

Berenov, Dmitriy Ivanovich (Deceased)

Raschety detaley na prochnost'; opredeleniye dolgovechnosti i dinamicheskikh usiliy (Strength Rating of Machine Elements; Determination of Durability and Dynamic Stresses) Moscow, Mashgiz, 1959. 214 p. 15,000 copies printed.

Reviewer: N.V. Molochnikov, Candidate of Technical Sciences; Ed.: V.I. Sokolovskiy, Candidate of Technical Sciences; Executive Ed. (Ural-Siberian Division, Mashgiz): T.M. Somova, Engineer; Tech. Ed.: N.A. Dugina.

PURPOSE: The book is intended for engineering and technical personnel.

COVERAGE: The book consists of two parts, first a revision of the author's Raschet mashin na prochnost (Analysis of Machines for Strength) published in 1953 in which a new method of analysis of

Card 1/5

BERENOV, Dmitriy Ivanovich; YASNEV, D.A. [deceased], red.; TSYMBALIST, N.N.,
red. izd-va; ZHF, Ye.M., tekhn red.

[Crushing equipment in concentration and crushing plants] Drobil'-
noe oborudovanie obogatitel'nykh i drobil'nykh fabrik. Sverdlovsk,
Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
Sverdlovskoe otd-nie, 1958. 295 p.
(MIRA 11:7)
(Crushing machinery)

Increasing the Quality (Cont.)

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describes the shortening of the production cycle, reducing weight and dimensions along with improvement of operational qualities, increase in durability, and finally improvements in the external appearance of machines. There are 98 references of which 95 are Soviet, 2 German, and 1 English.

TABLE OF CONTENTS:

Foreword

Ways of Increasing the Quality and Economic Efficiency of Machines
(Pal'mov, Ye. V., Doctor of Technical Sciences)

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Ch. I. Present Trends in Machine Design

1. Improvements in the Operational Features of New Machines (Berenov,

D. I., Engineer)

Choice of plan for a new machine 30

Selection of a drive 32

Mechanization and automation 34

Choice of materials and allowable stresses 41

Life of the machine 43

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Berezinov, D.

PHASE I BOOK EXPLOITATION

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Nauchno-tehnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Sverdlovskoye
otdeleniye

Povysheniye kachestva i ekonomichnosti mashin (Increasing the Quality and Efficiency
of Machinery) Moscow, Mashgiz, 1957. 626 p. 5,000 copies printed.

Additional Sponsoring Agency: Ural'skiy dom tekhniki.

Eds.: Pal'mov, Ye. V., Doctor of Technical Sciences, Sokolovskiy, V. I., Candidate
of Technical Sciences; Reviewers: Bogachev, I. N., Doctor of Technical Sciences,
Gorshkov, A. A., Doctor of Technical Sciences, Zhukov, P. A., Candidate of
Economic Sciences; Tech. Ed.: Sarafannikova, G. A.; Managing Ed. (Ural-Siberian
Division of Mashgiz): Sustavov, M. I., Engineer.

PURPOSE: The book is intended for engineering and technical personnel.

COVERAGE: The book generalizes and synthesizes experience accumulated by the
Ural plants and to some extent that of the Siberian plants in improving the
technical and economic features of manufactured machines and in improving their
quality. Data are also presented on attempts to lower the cost and to increase
the quality of machines during the designing and production stages. The author

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SOV/137-57-11-20773

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 20 (USSR)

AUTHOR: Berenov, D.I.

TITLE: New Machines at the Uralmashzavod for the Mining and Metal-lurgical Industries (Novyye mashiny Uralmashzavoda dlya gornorudnoy i metallurgicheskoy promyshlennosti)

PERIODICAL: V sb.: Novoye v konstruirovaniy tyazh. mashin. Moscow, Mashgiz, 1956, pp 85-94

ABSTRACT: A communication is presented on the engineering parameters and data on the design of excavators with 3 to 8-m³ shovels, and of walking draglines (excavators) with 14 to 20-m³ shovels. Excavators with 25-m³ shovels and 100-m booms are envisaged. Drilling pumps of 600 and 1100 hp and drilling winches of 1200 hp are being manufactured. Large bottom-dumping cone crushers and medium crushers with hydraulic aperture control, and diameters of 2.2 and 3 m, are scheduled for production. The production of 3.6x3.6-m ball mills and 200-220-m² sintering machines is being developed.

Card 1/1

I. M.

BERENOV, D.I.

USSR/Miscellaneous - Book review

Card 1/1 : Pub. 128 - 35/38

Authors : Groman, M. B., and Shneyderovich, R. M.

Title : Book review

Periodical : Vest. mash. 9, 103-106, Sep 1954

Abstract : A critical review is presented of D. I. Berenov's book, "The Stress Analysis of Machines," published by "Mashgiz" in 1953.

Institution :

Submitted :